



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/518,365	01/31/2005	Jan Kall	59643.00559	8234

32294 7590 12/29/2006  
SQUIRE, SANDERS & DEMPSEY L.L.P.  
14TH FLOOR  
8000 TOWERS CRESCENT  
TYSONS CORNER, VA 22182

EXAMINER
----------

LY, NGHI H

ART UNIT	PAPER NUMBER
----------	--------------

2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/29/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/518,365

Applicant(s)

KALL ET AL.

Examiner

Nghi H. Ly

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-35 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 2617

The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 09/25/06 has been entered.

### ***Response to Arguments***

2. Applicant's arguments with respect to claims 18-35 have been considered but are moot in view of the new ground(s) of rejection.

On pages 10, 11, 12 and 15 of Applicant's remarks, Applicant argues that Linkola and/or Foster does not teach the user equipment not currently being connected in the network.

In response, In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., *the user equipment not currently being connected in the network*) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In addition, Foster

Art Unit: 2617

does indeed teach wherein responsive to the user equipment not currently being reachable in the network (column 8, lines 25-27, see “*the system does not know or care where an individual terminal may be located until it receives a call for that terminal*” and column 8, lines 28-44, see “*Each base station simultaneously attempts to locate the called terminal*” and “*the base station transmits a “found” message*” and column 10, lines 15-17, see “*all base station have failed to locate the called handset*” and they read on Applicant’s “not currently being reachable”. In this case, the word “reachable” means to succeed in getting in contact with or communicating with. See DICTIONARY.COM for the definition of the word “reachable”), and the combination of Linkola and Foster does indeed teach Applicant’s claimed invention. In addition, applicant’s attention is directed to the teaching of Linkola and Foster in the claims below.

On pages 7 and 16 of Applicant’s remarks, Applicant further argues that Linkola and/or Foster does not teach the claimed limitations in claims 18 and 29.

In response, Linkola teaches a method in a communication system for providing a location service with geographical location information associated with a user equipment capable of communicating with the communication system (see Abstract), the method comprising the steps of: storing connection information identifying a connection of the user equipment in the communication system (see column 9, lines 63-66 and column 11, lines 36-52), and determining whether the user equipment is currently reachable in the network (see Abstract and column 5, line 50 to column 6, line 51), and wherein the connection information includes a service area identity or a cell global identity (see Abstract and column 1, lines 15-37, column 9, lines 63-67, column 8,

Art Unit: 2617

lines 45-53), the method further including the step of translating the connection information into geographical coordinates (see Abstract and column 1, lines 15-37, column 9, lines 63-67, column 8, lines 45-53), *and* Foster teaches wherein responsive to the user equipment not currently being reachable in the network (column 8, lines 25-27, see “the system does not know or care where an individual terminal may be located until it receives a call for that terminal” and column 8, lines 28-44, see “Each base station simultaneously attempts to locate the called terminal” and “the base station transmits a “found” message” and column 10, lines 15-17, see “all base station have failed to locate the called handset” and they read on Applicant’s “not currently being reachable”. In this case, the word “reachable” means to succeed in getting in contact with or communicating with. See DICTIONARY.COM for the definition of the word “reachable”), the location of the user equipment is determined in dependence on the last stored connection information for the user equipment (see column 7, lines 34-53 and column 8, lines 28-44). Therefore, the combination of Linkola and Foster does indeed teach Applicant’s claims 18 and 29. In addition, applicant’s attention is directed to the teaching of Linkola and Foster in the claims 18 and 29.

On page 16 of Applicant’s remarks, Applicant further argues that Amirijoo does not teach translating the connection information into geographical coordinates.

In response to applicant’s arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir.

Art Unit: 2617

1986). In this case, Osmo teaches the step of translating the connection information into geographical coordinates (see page 2, [0039], first seven lines) and the combination of Amirijoo, Linkola, Foster and Osmo teaches Applicant's claimed limitation.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 18, 21, 26-29 and 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linkola et al (US 6,708,033) in view of Foster et al (US 5,918,181) and further in view of Osmo (US 2003/0157942A1).

Art Unit: 2617

Regarding claims 18, 29 and 35, Linkola teaches a method in a communication system for providing a location service with geographical location information associated with a user equipment capable of communicating with the communication system (see Abstract), the method comprising the steps of: storing connection information identifying a connection of the user equipment in the communication system (see column 9, lines 63-66 and column 11, lines 36-52), and determining whether the user equipment is currently reachable in the network (see Abstract and column 5, line 50 to column 6, line 51), and wherein the connection information includes a service area identity or a cell global identity (see Abstract and column 1, lines 15-37, column 9, lines 63-67, column 8, lines 45-53).

Linkola does not specifically disclose wherein responsive to the user equipment not currently being reachable in the network, the location of the user equipment is determined in dependence on the stored connection information for the user equipment, the location of the user equipment is determined in dependence on the last stored connection information for the user equipment.

Foster teaches wherein responsive to the user equipment not currently being reachable in the network (column 8, lines 25-27, see "*the system does not know or care where an individual terminal may be located until it receives a call for that terminal*" and column 8, lines 28-44, see "*Each base station simultaneously attempts to locate the called terminal*" and "*the base station transmits a found message*" and column 10, lines 15-17, see "*all base station have failed to locate the called handset*" and they read on Applicant's "not currently being reachable". In this case, the word "*reachable*" means

Art Unit: 2617

to succeed in getting in contact with or communicating with. See [DICTIONARY.COM](http://dictionary.com) for the definition of the word "*reachable*"), the location of the user equipment is determined in dependence on the last stored connection information for the user equipment (see column 7, lines 34-53 and column 8, lines 28-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Foster into the system of Linkola in order to track and locate the terminals using a common database.

The combination of Linkola and Forter does not specifically disclose the step of translating the connection information into geographical coordinates.

Osmo teaches the step of translating the connection information into geographical coordinates (see page 2, [0039], first seven lines).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Osmo into the system of Linkola and Foster in order provide location dependent information in a communication system (see Osmo, Abstract).

Regarding claim 21, Linkola further teaches the connection information is stored in a control element of the communication system (see column 11, lines 46-52).

Regarding claim 26, Linkola further teaches the step of translating the connection information into geographical coordinates is carried out by a location service (see Abstract and column 1, lines 15-37, column 9, lines 63-67, column 8, lines 45-53).

Regarding claims 27 and 33, Linkola further teaches the communication system comprises a cellular telecommunications network (see fig.1).



Regarding claims 28 and 34, Linkola further teaches the user equipment comprises a mobile station (fig.1, see "MS").

Regarding claim 32, Linkola further teaches wherein network element is one or all of a radio network controller, a mobile switching center of the communication system, a serving GPRS support node of the communication system, or a serving mobile location center of the communication system (fig.1, see "BSC" or "MSC").

6. Claims 22, 23, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linkola et al (US 6,708,033) in view of Foster et al (US 5,918,181) and further in view of Osmo (US 2003/0157942A1) and Official notice.

Regarding claims 22, 23, 24 and 25, the combination of Linkola, Foster and Osmo teaches the connection information is stored in a control element of the communication system (see Linkola, column 11, lines 46-52), instead of the connection information is stored in a radio network controller of the communication system *or* in a mobile switching center of the communication system *or* in a serving GPRS support node of the communication system *or* in a serving mobile location center of the communication system as claimed. However, storing the connection information in a radio network controller of the communication system *or* in a mobile switching center of the communication system *or* in a serving GPRS support node of the communication system *or* in a serving mobile location center of the communication system are known in the art.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above teaching of Linkola, Foster and Osmol for provide a method as claimed, for storing the connection information.

7. Claims 19, 20, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Linkola et al (US 6,708,033) in view of Foster et al (US 5,918,181) and further in view of Osmo (US 2003/0157942A1) and Amirijoo et al (US 6,603,976).

Regarding claims 19, 30 and 31, the combination of Linkola, Foster and Osmo teaches claim 18. The combination of Linkola, Foster and Osmo does not specifically disclose the location service is provided by a gateway mobile location center.

Amirijoo teaches the location service is provided by a gateway mobile location center (see column 5, lines 32-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Amirijoo into the system of Linkola, Foster and Osmo in order to provide a method and system of delivering time of arrival positioning data to one externally operated and maintained requesting agent (see Amirijoo, column 1, lines 7-11).

Regarding claim 20, the combination of Linkola, Foster and Osmo teaches claim 18. The combination of Linkola, Foster and Osmo does not specifically disclose the gateway mobile location center is adapted to communicate with a gateway mobile location center of a further communication system.

Amirijoo teaches the gateway mobile location center is adapted to communicate with a gateway mobile location center of a further communication system (see fig.2b, connection between 14a and 14b).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Amirijoo into the system of Linkola, Foster and Osmo in order to provide a method and system of delivering time of arrival positioning data to one externally operated and maintained requesting agent (see Amirijoo, column 1, lines 7-11).

### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nghi H. Ly whose telephone number is (571) 272-7911. The examiner can normally be reached on 8:30 am-5:30 pm Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Application/Control Number: 10/518,365

Page 11

Art Unit: 2617

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Nghi H. Ly

A handwritten signature in black ink, appearing to read 'Nghi H. Ly', located below the printed name.